

Claims

1. An interlocking unit, comprising one or more tongues and one or more grooves being provided with mechanically integrating locking means, wherein on at least a part of the one or more tongues or on at least a part of the one or more grooves, or on 5 at least a part of both, is provided a polymer film having a T_g of higher than about -15°C.
2. An interlocking unit according to claim 1, wherein at least one of the one or more polymer films has a T_g of from about -10 to about 65°C.
3. An interlocking unit according to claim 1, at least one of the one or more polymer films has a T_g of from about 0 to about 40°C.
- 10 4. An interlocking unit according to claim 1, wherein the polymer films have a moisture content of less than 2 weight % based on the solids content of the polymer film.
5. An interlocking unit according to claim 1, wherein at least one of the one or more polymer films has a pendulum hardness of from about 10 to about 160 pendelums.
- 15 6. An interlocking unit according to claim 1, wherein at least one of the one or more polymer films has a pendulum hardness of from about 20 to about 120 pendelums.
7. An interlocking unit according to claim 1, wherein at least one of the one or more polymer films is formed from one or more polymer dispersions or one or more polymer solutions comprising at least one polymer prepared from one or more ethylenically unsaturated monomers.
- 20 8. An interlocking unit according to claim 7, wherein at least one of the one or more polymer films is formed from one or more polymer dispersions or one or more polymer solutions comprising polyvinyl acetate.
9. An interlocking unit according to claim 7, wherein the one or more polymer dispersions or the one or more polymer solutions comprise at least one plasticiser.
- 25 10. An interlocking unit according to claim 7, wherein the one or more polymer dispersions or the one or more polymer solutions comprise polyvinyl alcohol.
11. An interlocking unit according to claim 7, wherein the one or more polymer dispersions or the one or more polymer solutions comprise one or more surfactants.
12. An interlocking unit according to claim 7, wherein the one or more polymer 30 dispersions or the one or more polymer solutions further comprise an etherified amino resin.
13. An interlocking unit according to claim 7, wherein in at least one first polymer film is formed from one or more dispersions or form one or more polymer solutions having an amount of plasticiser within the range of from about 0 to about 10 weight % based on 35 the dry solids of the dispersion, and at least one second polymer film is formed from one or more dispersions having an amount of plasticiser of less than about 15 weight % based on the dry solids of the dispersion.

14. An interlocking unit according to claim 1, wherein the one or more tongues and the one or more grooves are made of wood-based material.

15. An interlocking unit, comprising one or more tongues and one or more grooves being provided with mechanically integrating locking means, wherein on at least 5 a part of the one or more tongues or on at least a part of the one or more grooves, or on at least a part of both, is provided a polymer film having a T_g of from about -10 to about 65°C, and wherein at least one of the one or more polymer films is formed from one or more polymer dispersions or one or more polymer solutions comprising polyvinyl acetate and at least one plasticiser in an amount of less than about 15 weight % based on the 10 content of dry solids in the dispersion.

16. A floor covering comprising two or more interlocking units according to claim 1 or 7.

17. A wall covering comprising two or more interlocking units according to claim 1 or 7.

15 18. Method for producing an interlocking unit comprising the steps of:

(i) providing an interlocking unit comprising one or more tongues and one or more grooves along opposite sides of a locking unit and at least one groove with mechanically integrated locking means;

(ii) applying to at least a part of said one or more tongues or at least a part of said one or 20 more grooves, or both, one or more polymer dispersions or one or more polymer solutions; and,

(iii) forming at least one polymer film on at least a part of said one or more tongues or at least a part of said one or more grooves, or both, wherein said formed polymer film has a T_g higher than about -15°C.

25 19. Method according to claim 18, wherein at least one of the one or more polymer films has a T_g of from about -10 to about 65°C.

20. Method according to claim 18, wherein the one or more polymer dispersions or the one or more polymer solutions comprise at least one polymer prepared from one or more ethylenically unsaturated monomers, and at least one plasticiser.